

Figure 1A

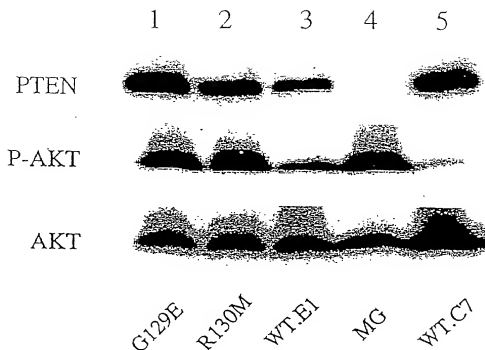


Figure 1B

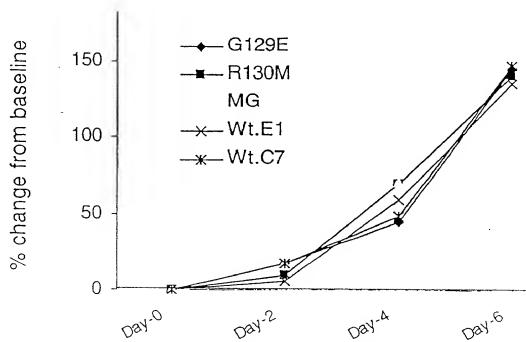


Figure 2A

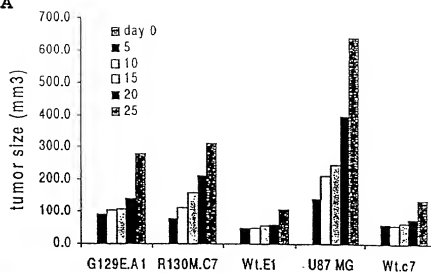


Figure 2B

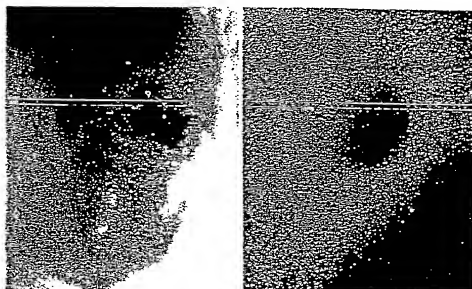


Figure 2C

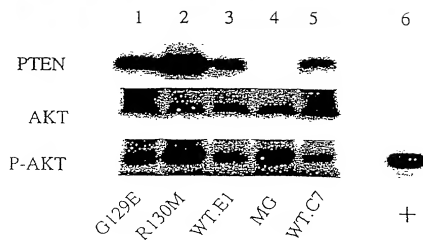


Figure 3A

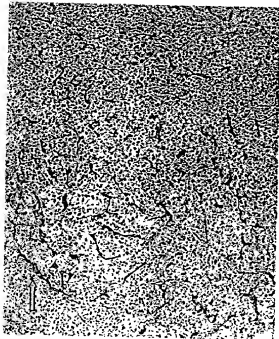


Figure 3B

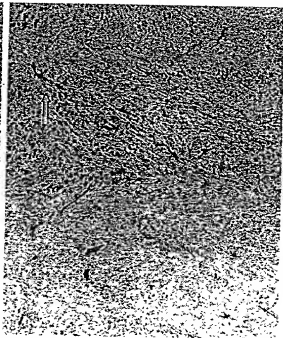


Figure 3C

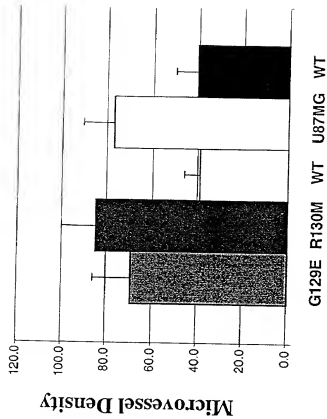


Figure 3d

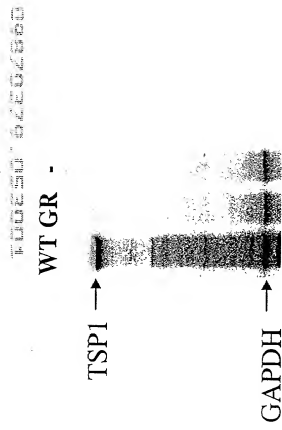


Figure 3E

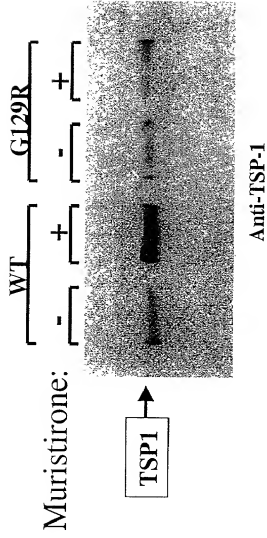
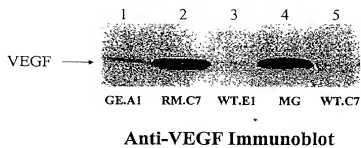


Figure 4



20070319-052004

Figure 5A



Figure 5B

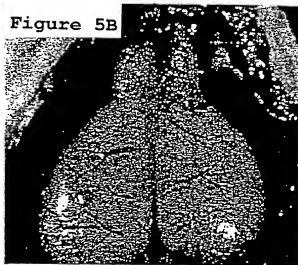


Figure 5C



Figure 5D

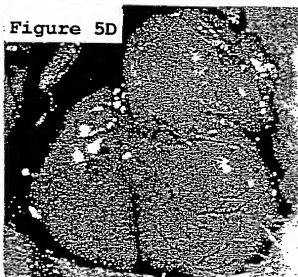


Figure 5E

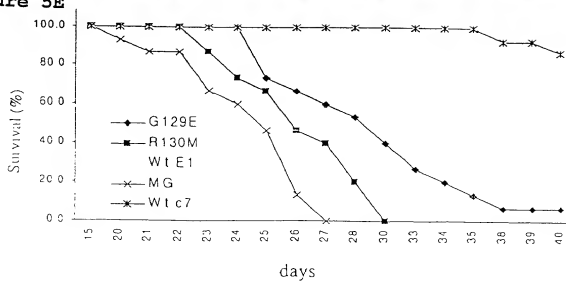
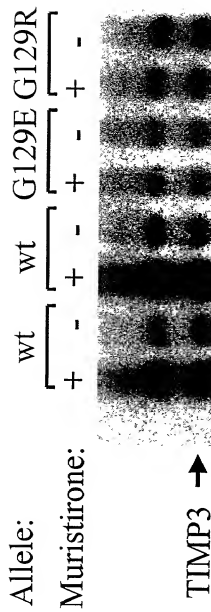


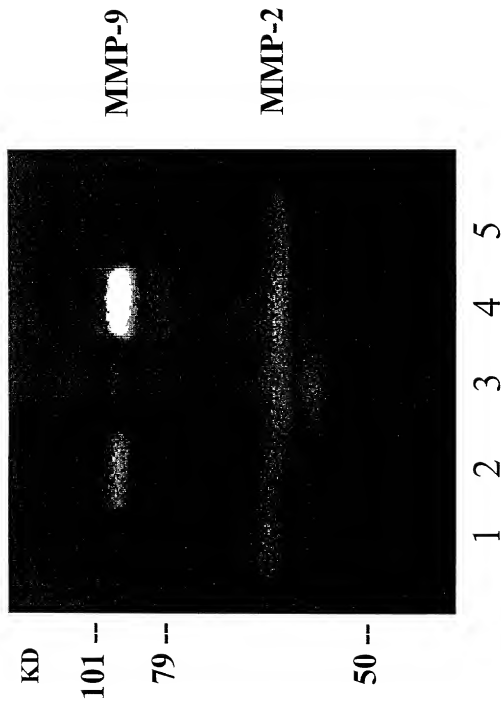
Figure 6

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100250-62002860

Figure 7



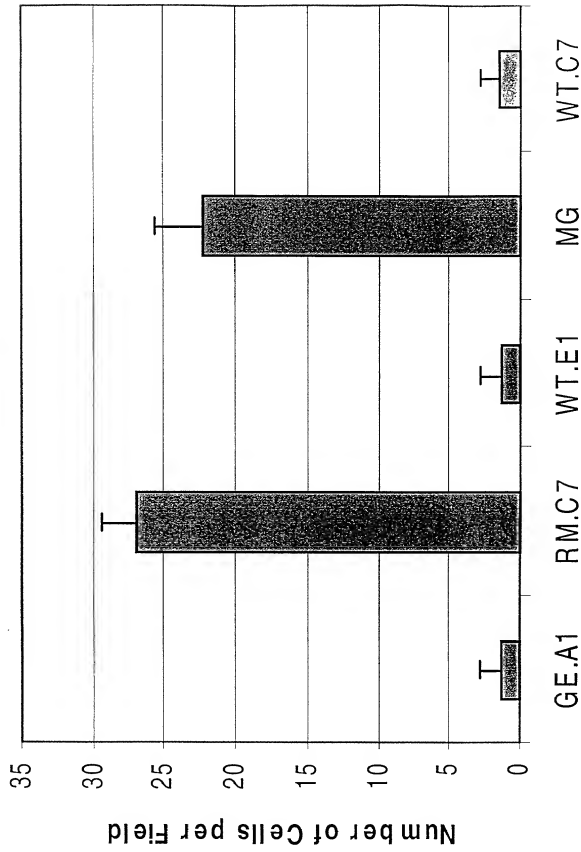


Figure 9A

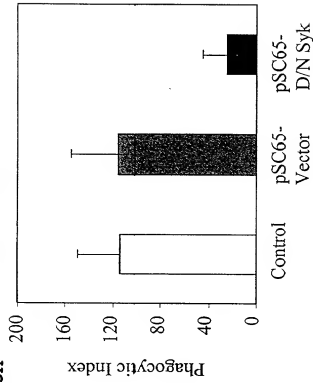
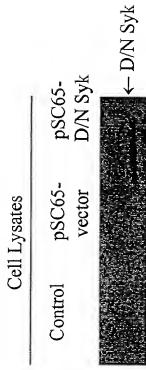


Figure 9B



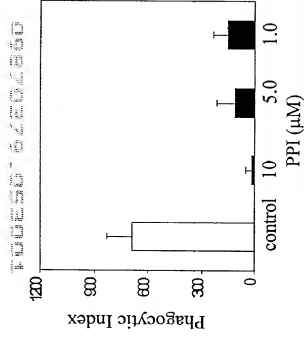


Figure 10A

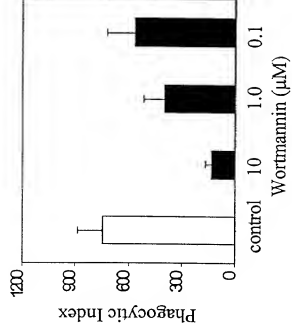


Figure 10B

Figure 11A

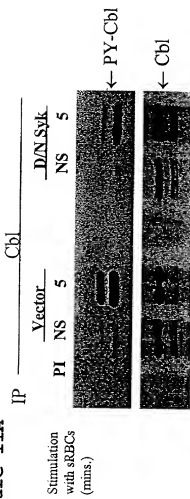


Figure 11B

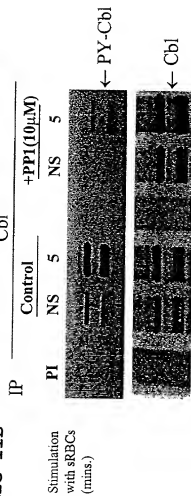


Figure 12

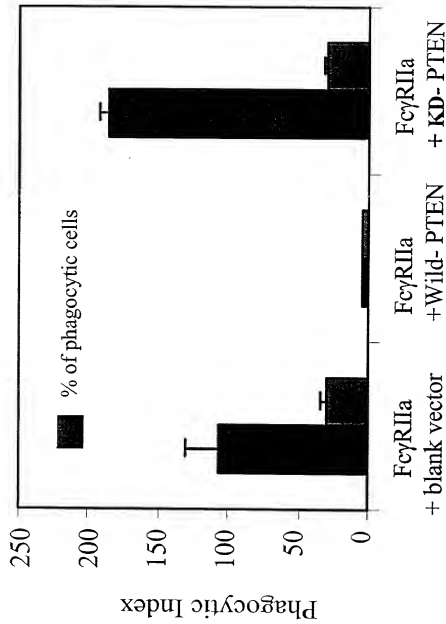


Figure 13

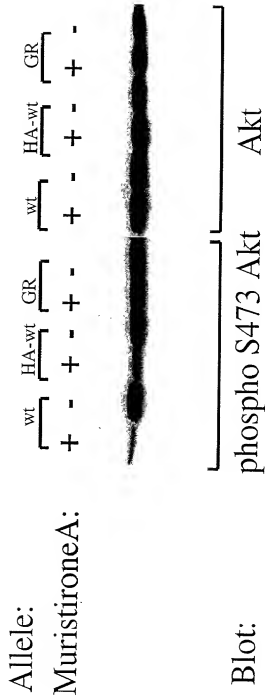


Figure 14

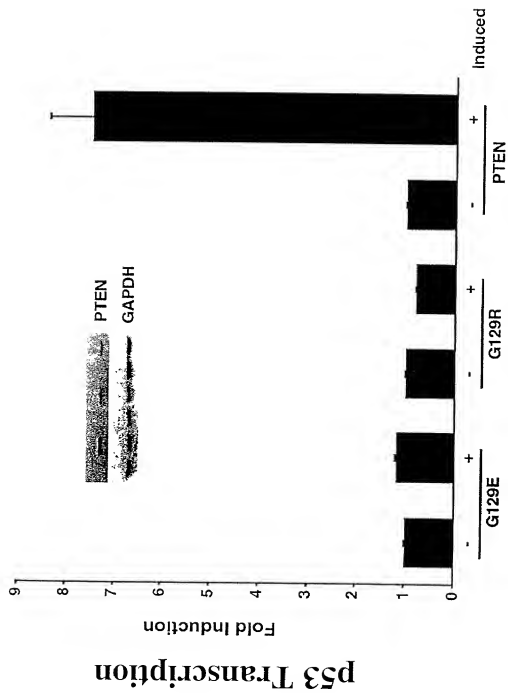


Figure 15

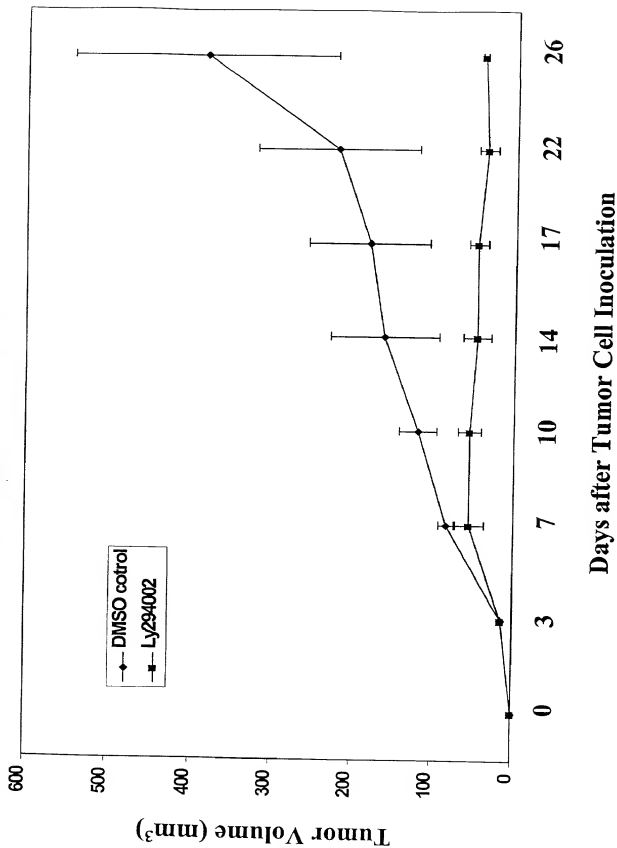


Figure 16

Y00050-62E02860

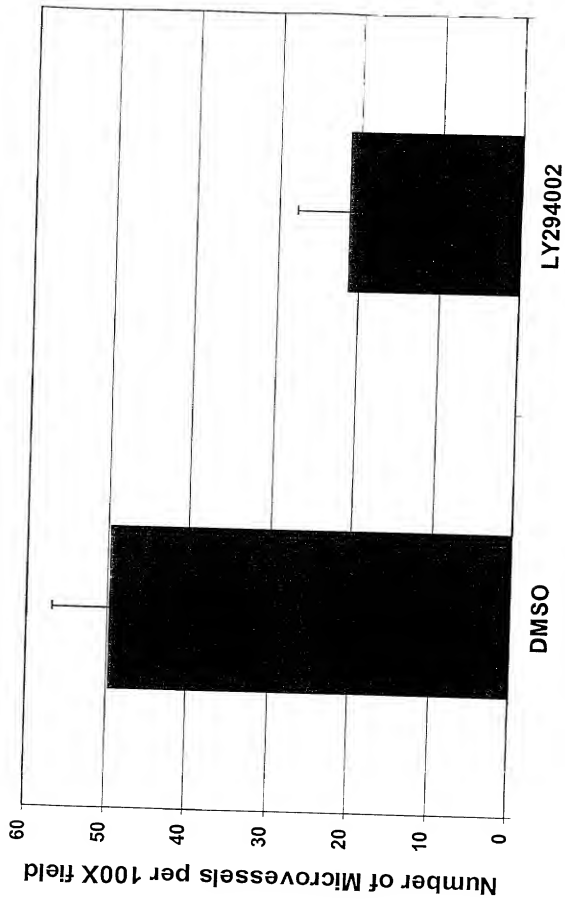


Figure 17

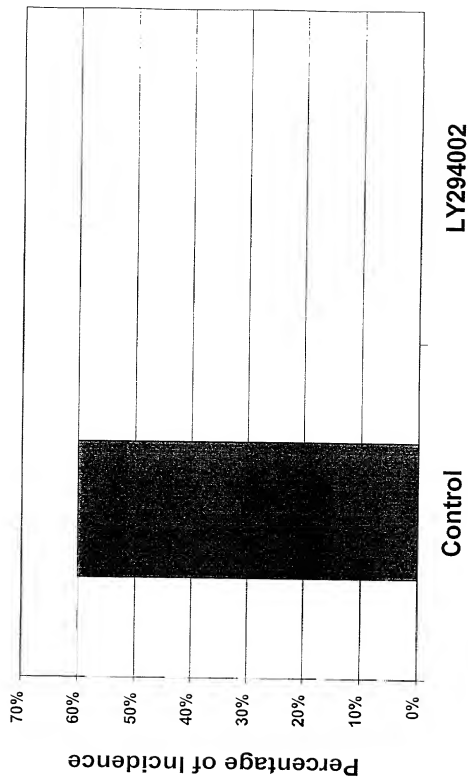


Figure 18

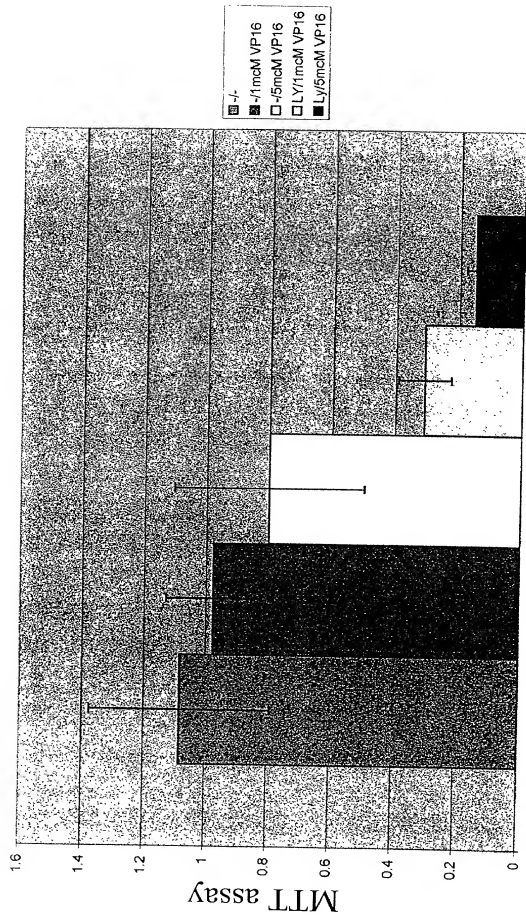


Figure 19

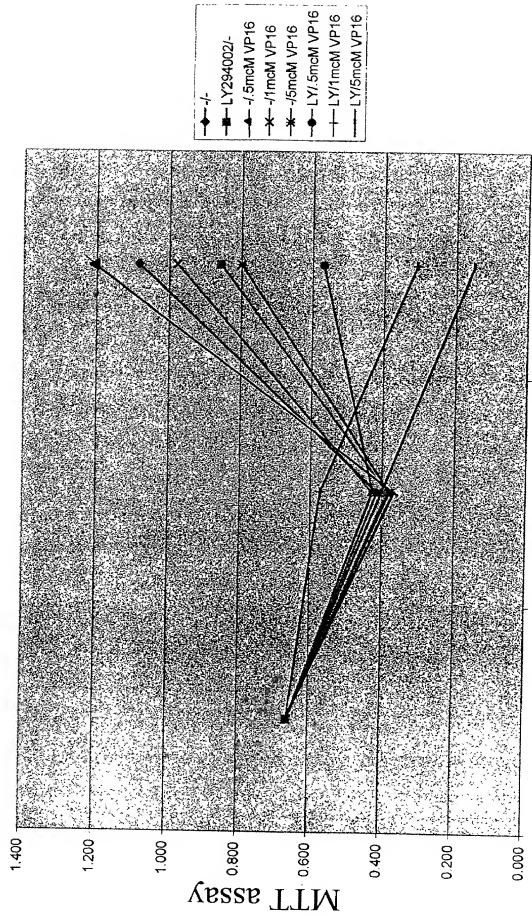
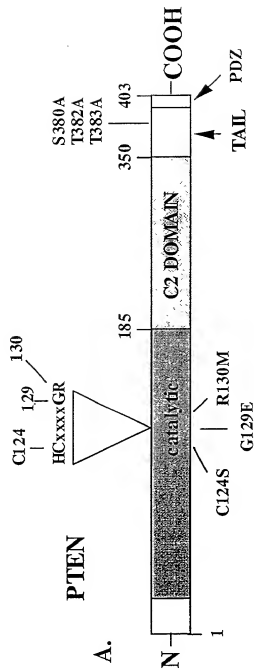


Fig. 20A



1760 1770 1780 1790 1800
 ACAAAATGTTTTCACCTTTTGGGTAATACGTTCTTCATACCAGGACCAGAG
 TGTTTTACAAAGTGAACCCATTATGCAAGAAGTATGGTCTCTGGTCTC
 D K M F H F W V N T F F I P G P E
 _____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC_____>

>ClaI
 |
 >BsiXI
 |
 >BsiQI >TaqI
 | |
 1810 1820 1830 1840 1850
 GAAACCTCAGAAAAAGTGGAAAAATGGAAGTCTTTGTGATCAGGAAATCGA
 CTTTGGAGTCTTTTTCACCTTTTACCTTCAGAAACACTAGTCCTTTAGCT
 E T S E K V E N G S L C D Q E I D
 _____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC_____>

>RsaI
 |
 1860 1870 1880 1890 1900
 TAGCATTTGCAGTATAGAGCGTGCAGATAAATGACAAGGAGTATCTGTAC
 ATCGTAAACGTCATATCTCGCAGCTCTATTACTGTTCCCTCATAGAACATG
 S I C S I E R A D N D K E Y L V
 _____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC_____>

1910 1920 1930 1940 1950
 TCACCTTAACAAAAACGATCTTGACAAAGCAACAAAGACAAGGCCAAC
 AGTGGATTGTTTGTGCTAGAACTGTTTCGTTTGTTCGTCCGGTGTG
 L T L T K N D L D K A N K D K A N
 _____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC_____>

1960 1970 1980 1990 2000
 CGATACTTCTCCAAATTTTAAAGGTGAAACTATACCTTTACAAAAACAGT
 GCTATGAAGAGAGGTTTAAAAATCCACTTTGATATGAAATGTTTGTGCA
 R Y F S P N F K V K L Y F T K T V
 _____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC_____>

2010 2020 2030 2040 2050
 AGAGGAGCCATCAAAATCCAGAGGCTAGCAGTTCAACTTCTGTGACTCCAG
 TCTCCTCGGTAGTTTAGGTCTCCGATCGTCAAGTTGAAGACACTGAGGTC
 E E P S N P E A S S S T S V T P
 _____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC_____>

>BsiQI
 |
 2060 2070 2080 2090 2100
 ATGTTAGTGACAATGAACCTGATCATTATAGATATTCTGACCACTGAC
 TACAATCACTGTACTTGGACTAGTAATATCTATAAGACTGTGGTGACTG
 D V S D N E P D H Y R Y S D T T D
 _____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC_____>

>BscCI
 |
 2110 2120 2130 2140 2150
 TCTGATCCAGAGAATGAACCTTTTGATGAAGATCAGCATTCACAAATTAC

Fig. 20B (continued)

CTTCTGCCATCTCTCTCCTCCTTTTCTTCAGCCACAGGCTCCCAGACAT
GAAGACGGTAGAGAGAGGAGGAAAAAGAGTCGGTGTCCGAGGGTCTGTGA

M>

—>

>EcoRV

960 970 980 990 1000
GACAGCCATCATCAAGAGATCGTTAGCAGAAACAAAGGAGATATCAAG
CTGTGCGGTAGTAGTTTCTCTAGCAATCGTCTTTGTTTTCCTCTATAGTTC
T A I I K E I V S R N K R R Y Q>

___HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC___>

>TaqI

1010 1020 1030 1040 1050
AGGATGGATTTCGACTTAGACTTGACCTATATTTATCCAAATATTATGCT
TCCTACCTAAGCTGAATCTGAACTGGATATAAATAGGTTATAATAACGA
E D G F D L D L T Y I Y P N I I A>

___HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC___>

>PstI

1060 1070 1080 1090 1100
ATGGGATTTCCTGCAGAAAGACTTGAAGGTGTATACAGGACAAATATTGA
TACCCTTAAAGGACGCTTTTCTGAACCTCCACATATGTCCTTGTATAACT
M G F P A E R L E G V Y R N N I D>

___HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC___>

1110 1120 1130 1140 1150
TGATGTAGTAAGGTTTTTGGATTCAAAGCATAAAAACCATTAAGATAT
ACTACATCATTCAAAAACCTAAGTTTCGTATTTTGGTAATGTTCTATA
D V V R F L D S K H K N H Y K I>

___HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC___>

>PstI

1160 1170 1180 1190 1200
ACAATCTATGTGCTGAGAGACATTATGACACCGCCAAATTTAACTGCAGA
TGTAGATACACGACTCTCTGTAATCTGTGGCGGTTTAAATGACGTCT
Y N L C A E R H Y D T A K F N C R>

___HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC___>

1210 1220 1230 1240 1250
GTTGCACAGTATCCTTTTGAAGACCATAAACCACACAGCTAGAAGTAT
CAACGTGTCTATAGGAAAACCTCTGATTTGGGTGGTGTGATCTTGAATA
V A Q Y P F E D H N P P Q L E L I>

___HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC___>

>BglII

1260 1270 1280 1290 1300
CAAAACCTTCTGTGAAGATCTTGACCAATGGCTAAGTGAAGATGACAATC
GTTTGGGAAGACACTTCTAGAAGTGGTACCGATTCACTTCTACTGTTAG
K P F C E D L D Q W L S E D D N>

___HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC___>

Fig. 20B

1310 1320 1330 1340 1350
 ATGTTGCACGAATTCACGTGTAAGCTGGAAAGGGACGGACTGGTGTAAATG
 TACAACGTCGTTAAGTGACATTTTCGACCTTTCCCTGCCTGACCAATTTAC
 H V A A I H C K A G K G R T G V M>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

1360 1370 1380 1390 1400
 ATTTGTGCATATTTATTCATCGGGGCAAAATTTTAAAGGCACAAGAGGC
 TAAACACGTATAAATAAGCTAGCCCCGTTTAAAAATTTCCGTGTTCTCCG
 I C A Y L L H R G K F L K A Q E A>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

1410 1420 1430 1440 1450
 CCTAGATTTTATGCGGAAGTAAGGACCAGAGACAAAAAGGGAGTCACAA
 GGATCTAAAAATACCCCTTCATTCCTGGTCTCTGTTTTCCCTCAGTGTT
 L D F Y G E V R T R D K K G V T>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

1460 1470 1480 1490 1500
 TTCCCACTCAGAGGCGCTATGTATATTATATAGCTACCTGCTAAAAAAT
 AAGGGTCAGTCTCCGCGATACATATAATAATATCGATGGACGATTTTTA
 I P S Q R R Y V Y Y Y S Y L L K N>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

1510 1520 1530 1540 1550
 CACCTGGATTACAGACCCGTGGCACTGCTGTTTTCACAAAGATGATGTTTGA
 GTGGACCTAATGTCTGGGCACCGTCAGCACAAGGTGTTCTACTACAAAT
 H L D Y R P V A L L F H K M M F E>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

1560 1570 1580 1590 1600
 AACTATTCCAANTGTTCACTGGCGGAACCTGCAATCCTCAGTTTGTGGTCT
 TTGATAAGGTTACAAGTCACCGCCTTGAACGTTAGGAGTCAAAACCCAGA
 T I P M F S G G T C N P Q F V V>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

1610 1620 1630 1640 1650
 GCCAGCTAAAGGTGAAGATATATTCCTCCAATTCAGGACCCACGCGGCGG
 CGGTGCGATTTCACCTTCTATATAAGGAGGTTAAGTCCTGGGTGCGCCGCC
 C Q L K V K I Y S S N S G P T R R>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

>RsaI

1660 1670 1680 1690 1700
 GAGGACAAGTTTCATGTACTTTGAGTTCCCTCAGCCATTGCTGTGTGTGG
 CTCCTGTTCAAGTACATGAACTCAAGGGAGTCGGTAACGGACACACACC
 E D K F M Y F E F P Q P L P V C G>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

>EcoRV

1710 1720 1730 1740 1750
 TGATATCAAAGTAGAGTTCTTCCACAAACAGAAAGATGCTCAAAAAGG
 ACTATAGTTTTCATCTCAAGAAGGTGTTGTCTTGTCTACGAGTTTTC
 D I K V E F F H K Q N K M L K K>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

Fig. 20B (continued)

AGACTAGGTCTCTTACTTGGAAACTACTTCTAGTCGTAAGTGTTTAATG
 S D P E N E P F D E D Q H S Q I T>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

2160
 AAAAGTCTGA
 TTTTCAGACT
 K V *>

Fig. 20B (continued)